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J. Lamb / 1034A

Requestor / Document Center (is requested to provide the following document)

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INTER-COMPANY CORRESPONDENCE

(INSERT NAME) COMPANY CARBIDE AND CARBON CHEMICALS CORP. LOCATION Post Office Box P OAK RIDGE, TENN.

UNCLASSIFIED

REPORT NO. KZ 2445

TO R. W. Levin
LOCATION K-303-8

DATE August 6, 1946

ANSWERING LETTER DATE

ATTENTION

COPY TO F. H. Anderson
E. D. Flickinger
A. de la Garza
J. B. Marcum
A. M. Tuholsky
File

D-13228

SUBJECT Present Accumulations of T in the 216 Area and 1401 Area.

LOAN COPY
TO BE RETURNED TO
PLANT RECORDS K-1034

Dear Sir:

Complaints concerning careless handling of T compounds in the C-216 Area and thus presenting an opportunity for diversion have occurred recently. An investigation of this Area showed that some controls should be established instantly as a precaution against inadvertent removal of T material. T compound accumulations in the C-216 Area occur at the locations listed below.

a. The 1301 Building T oxide conversion to TF_6 occurs in this building with strict accounting procedures existing on the shipment and delivery of T compounds. Locked oxide storage pens are located on the second floor of this building, and the door to the stairway from the second floor also is locked.

b. The 1303 Building T compounds in this building are present in contaminated solutions as ammonium diuranate, and as oxide. The building is completely locked on the night shifts.

c. The 1401 Building Contaminated oils are recovered in a still process operated by the Process Design and Development Department. The T containing filter cake obtained from this process is at present lying in cans on the floor. It is expected that the contaminated oils program will be partially turned over to Coded Chemicals within one or two weeks. The oil will be filtered, the T-bearing filter cake retained and the oil turned over to the Process Design and Development Department for cleaning.

The 816 recovery program is being operated by the Process Design and Development Department. T compound occurs in the form of sodium diuranate contained in five gallon cans left on the floor near the process. Approximately 1500 pounds of this T compound is being processed by an engineer on day shifts only. This recovery program should be completed within two or three weeks.

Feed and tails concentrations of C-616 are used in various experiments by the Development Section of Process Design and Development Department. About twenty cylinders of this material remain locked in a Mosler safe and has not been used for an estimated two months. Other cylinders are at the experimental stations, connected to the system. Experiments in progress at this time include a B-R pump test, a W pump test, an d the F-1 running test stand (using tails conc.). All of these cylinders are inventoried weekly, and reported to J. B. Marcum. Apparatus is now being fabricated to consolidate the UF_6 in these 20-odd small containers into one large one. No definite time is known when this will occur.

Converter unplugging experiments will begin within a few days on converter s from the 305 Section. T material is recovered from the C-716 by freezing in a cold trap in the basement. It has been the experience of the unplugging group that no more than one pound of T material is recovered from one container. No definite procedure for handling the T material accumulated from the forthcoming experiments has been formulated. One cylinder of feed concentration UF_6 for the unplugging experiments is being kept in a locked file cabinet in an office.

Serious negligence is occuring in the 816 recovery program. T compounds (sodium uranate) are allowed to spill on the floor where they may be swept up by any individual. Nothing is being done to protect the T compounds used in this program from diversion.

The T-containing filter cake from the oil reclamation process is exposed to theft, as it is contained in unwatched cans lying unprotected on the floor.

T cylinders used in other experiments in the 1401 Building are under satisfactory control;however, the cylinders left connected to experiment manifolds are exposed in some degree to diversion.

Procedures in the 1301 and 1303 Buildings are established in such a manner that diversion would be relatively more difficult. In the 1303 Building, the furnaces used for drying the ammonium uranate and the solid ammonium uranate stored in that room are exposed to diversion. This room is locked on the night shifts; however, and is under the observation of several operaters and engineers during the daytime.

Most of the recent complaints concerning carelessness in T material handling are obviously directed against the 816 recovery program. Opinions expressed by the engineers concerned with this program and other super-

visors interested in it stated that none of the personnel show any interest in the work, and that the nature of the work has not been disclosed promiscuously. If a guard were posted at the location of the experiment considerable attention would be attracted to it.

All routine shipments of T compounds from the 1300 and 1400 Areas are made by Coded Chemicals. These two areas are enclosed in the same security fencing, with about six outlets to the non-restricted area. Control of T movements from the restricted area could be accomplished by the following program:

a. Establish an identification system for all containers of T compounds. Some type of coding could be painted on the can or cylinder.

b. Prohibit removal of T compound through all gates in the restricted area except one. This gate would preferably be the one in front of 1301. Guards located at other gates would not allow the coded T containers to pass through.

c. Responsibility for the clearance of T compounds from the restricted area would be placed in the hands of Coded Chemicals representatives, who would have unrestricted entry to and egress from this area. Provide these representatives with a permanent "material pass" to be displayed to the guards.

d. Any other individual desiring to remove T material from this area would first contact the Coded Chemicals respresentative located within this area. The representative would obtain sufficient identity of this material (weight, cylinder number, or other means) to account for it, its destination, and then issue a "material pass" to permit the removal of the material through the gate. Guard would inspect pass.

Arrangements between Coded Chemicals and those concerned with the converter unplugging experiments should be established whereby all T material collected is delivered immediately to Coded Chemicals.

Very truly yours,

N. H. Van Wie

N. H. Van Wie

NHVW/mf